QUIZZES

Practice Test-1 Life Processes in Animals and Plants (Transport in Pl...

10 Questions

7 min

Topics

Uptake and transport of minerals and water, Ascent of sap, Water Potential, Translocation of organic solutes, Transpiration and factors affecting it

Start Quiz

06 : 59

1/10 7 min Hint

Q : Which essential nutrient in plant is required in greatest amount?

A Nitrogen

B Phosphorous

C Potassium

D Calcium

06 : 57

Q 2/10 7 min Hint

Q : Water moves across a selectively permeable membrane:

	From	To
A	Region of higher water potential potential	Region of lower water
B	Lower water concentration concentration	Higher water
C	Higher solute concentration concentration	Lower solute
D	Region of higher osmotic potential osmotic potential	Regional of lower

1 2 3 4 5 6 7

06 : 56

3/10 7 min Hint

Q : Deplasmolysis occurs in a cell when it is placed in

A Hypotonic solution

B Hypertonic solution

C Isotonic solution

D Buffer solution

06 : 55

4/10 7 min Hint

Q : Root pressure develops due to

A Passive absorption of ions

B Active absorption of ions

C Active absorption of glucose

D Passive absorption of sucrose

06 : 54

5/10 7 min Hint

Q : Transport of food material in higher plants takes place through

A Companion cells

B Transfusion tissues

C Tracheids

D Sieve elements

06 : 53

6/10 7 min Hint

Q : Apoplast pathway can take water and minerals upto:

A Xylem

B Endodermis

C Cortex

D Pericycle

06 : 52

7/10 7 min Hint

Q : The tendency of dissimilar particles or surfaces to cling to one another is called:

A Tension

B Cohesion

C Climbing

D Adhesion

06 : 49

Q 8/10 7 min Hint

Q : It is found among water molecules by which water can move up the xylem like an unbroken column:

A Covalent bonds

B Ionic bonds

C H-bonds

D Ester bonds

06 : 47

9/10 7 min Hint

Q : It is the attraction among water molecules which holds them together within the xylem tube:

A Tension

B Adhesion

C Cohesion

D Imbibition

06 : 46

10/10 7 min Hint

Q : Food in plants is transported in the form of:

A Monosaccharide

B Polysaccharide

C Disaccharide

D Oligosaccharide

Correct

Unattempted

Incorrect

1/10

Q : Which essential nutrient in plant is required in greatest amount?

A Nitrogen

B Phosphorous

C Potassium

D Calcium

Explanation

As protein is most abundant organic compound in the cell. To make protein, nitrogen is most essential element. So nitrogen is most abundant than other elements in options.

Q : Water moves across a selectively permeable membrane:

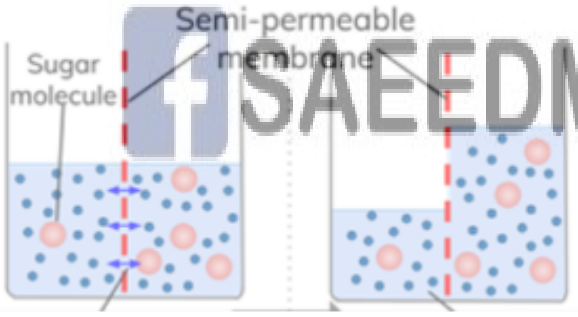
A
From Region of higher water potential potential
To Region of lower water

B
From Lower water concentration concentration
To Higher water

C
From Higher solute concentration concentration
To Lower solute

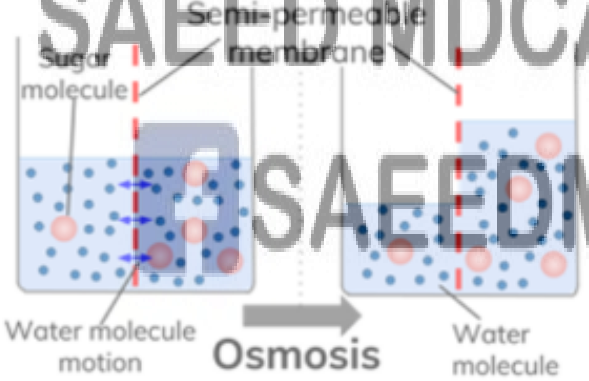
D
From Region of higher osmotic potential osmotic potential
To Regional of lower

Explanation



	From	To
A	Region of higher water potential	Region of lower water potential
B	Lower water concentration concentration	Higher water concentration
C	Higher solute concentration concentration	Lower solute concentration
D	Region of higher osmotic potential	Regional of lower osmotic potential

Explanation



Incorrect

Q 3/10

Q : Deplasmolysis occurs in a cell when it is placed in

A Hypotonic solution

B Hypertonic solution

C Isotonic solution

D Buffer solution

Explanation

Correct | Unattempted

Incorrect | 4/10

Q : Root pressure develops due to

A Passive absorption of ions

B Active absorption of ions

C Active absorption of glucose

D Passive absorption of sucrose

Explanation

Root pressure is created by the active secretion of salts and into the xylem sap. This lowers the water potential of xylem sap. Water enters the xylem cells by osmosis, thus increasing the level of sap in the xylem cells. It may take apoplast, symplast or vacuolar pathway increasing the hydrostatic pressure in cells, this pushes the water upwards.

Q : Transport of food material in higher plants takes place through

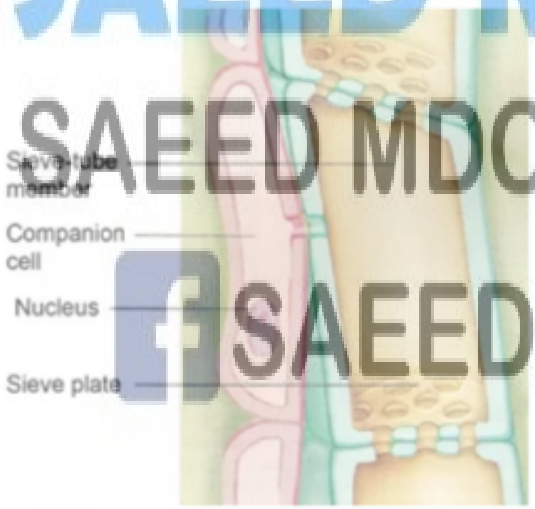
A Companion cells

B Transfusion tissues

C Tracheids

D Sieve elements

Explanation



Correct Unattempted

Incorrect Q 6/10

Q : Apoplast pathway can take water and minerals upto:

A Xylem

B Endodermis

C Cortex

D Pericycle

Explanation

Incorrect

7/10

Q : The tendency of dissimilar particles or surfaces to cling to one another is called:

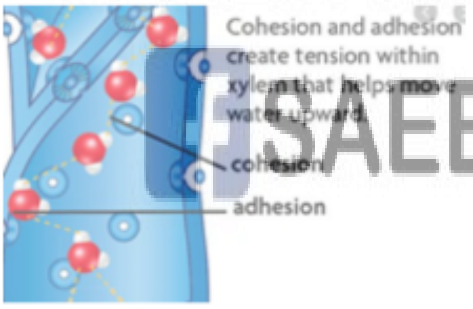
A Tension

B Cohesion

C Climbing

D Adhesion

Explanation



Correct | Unattempted

Incorrect | 8/10

Q : It is found among water molecules by which water can move up the xylem like an unbroken column:

A Covalent bonds

B Ionic bonds

C H-bonds

D Ester bonds

Explanation

The water molecules leaving the xylem are attached to other water molecules in the same xylem tube by hydrogen bonds called cohesion of water molecules.

Q : It is the attraction among water molecules which holds them together within the xylem tube:

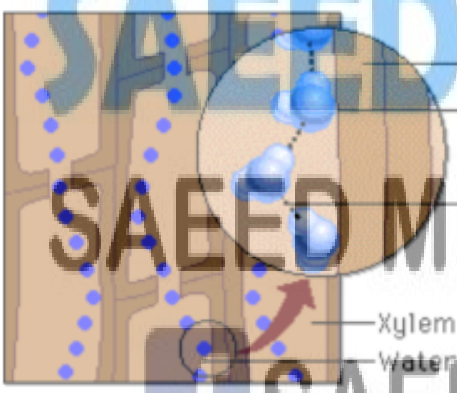
A Tension

B Adhesion

C Cohesion

D Imbibition

Explanation



The water molecules leaving the xylem are attached to other water molecules in the same xylem tube by hydrogen bonds called cohesion of water molecules.

Correct | Unattempted

Incorrect | 10/10

Q : Food in plants is transported in the form of:

A Monosaccharide

B Polysaccharide

C Disaccharide

D Oligosaccharide

Explanation

The glucose (monosaccharide) is formed in the photosynthesizing cells, small quantity is used within the cells, while, remaining is converted to sucrose (disaccharide). This sucrose is transported through the bundle sheath cells to the companion cells and store in the form of starch.

QUIZZES

Practice Test-2 Life Processes in Animals and Plants (Transport in Pl...

10 Questions

7 min

Topics

Blood circulatory system (Blood), Structure of Human Heart, Blood Vessels, Blood Pressure and Rate of Blood flow

06 : 59

Q 1/10 7 min Hint

Q : Most of the plasma proteins are synthesized in:

A Liver

B Kidneys

C Bone marrow

D Thymus

06 : 58

2/10 7 min Hint

Q : It acts as anticoagulant:

A Thrombin

B Prothrombin

C Histamine

D Heparin

06 : 57

3/10 7 min Hint

Q : Plasma proteins that play main role in maintenance of colloid osmotic pressure are:

A Prothrombin

B Albumin

C Globulins

D Fibrinogen

06 : 56

4/10 7 min Hint

Q : In worm infection, these are most likely to be increased:

A Neutrophils

B Eosinophils

C Basophils

D Lymphocyte

06 : 54

5/10 7 min Hint

Q : In human circulation, a part of heart that receives deoxygenated blood from body is:

A Left ventricle

B Right ventricle

C Right atrium

D Left atrium

06 : 53

6/10 7 min Hint

Q : It provides protection to heart by preventing over extension:

A Epicardium

B **Pericardium**

C Pericardial fluid

D Pleural fluid

06 : 52

Q 7/10 7 min Hint

Q : This one is not the property of heart muscles:

A Automaticity

B Rhythmicity

C Branches

D Regular striations

06 : 49

Q 8/10 7 min Hint

Q : Pulmonary artery carries:

A Oxygenated blood to lungs

B Deoxygenated blood to lungs

C Oxygenated blood from lungs

D Deoxygenated blood from lungs

06 : 47

Q 9/10 7 min Hint

Q : How many pulmonary veins carry blood from lungs to heart?

A 1

B 2

C 3

D 4

06 : 46

Q 10/10 7 min Hint

Q : The difference between systolic and diastolic pressure become zero in:

A Aorta

B Arteries

C Arterioles

D Capillaries

Correct | Unattempted

Incorrect | 1/10

Q : Most of the plasma proteins are synthesized in:

A Liver

B Kidneys

C Bone marrow

D Thymus

Explanation

Synthesis of plasma proteins is the main function of body's central metabolic station.

Correct | Unattempted

Incorrect | 2/10

Q : It acts as anticoagulant:

A Thrombin

B Prothrombin

C Histamine

D Heparin

Explanation

Thrombin and prothrombin are involved in the blood clotting process. Histamine is responsible for inflammatory response whereas heparin acts as anticoagulant.

Correct | Unattempted

Incorrect | 3/10

Q : Plasma proteins that play main role in maintenance of colloid osmotic pressure are:

A Prothrombin

B Albumin

C Globulins

D Fibrinogen

Explanation

The maintenance of colloidal osmotic pressure of blood is mainly maintained by albumin.

Correct | Unattempted

Incorrect | 4/10

Q : In worm infection, these are most likely to be increased:

A Neutrophils

B Eosinophils

C Basophils

D Lymphocyte

Explanation

Eosinophils are white blood cells that are specific for the killing of parasites and worms as a result their number increases in such infections.

Correct | Unattempted

Incorrect | 5/10

Q : In human circulation, a part of heart that receives deoxygenated blood from body is:

A Left ventricle

B Right ventricle

C Right atrium

D Left atrium

Explanation

Right side of heart deals with deoxygenated blood whereas left side of heart deals with oxygenated blood.

Correct | Unattempted

Incorrect | 6/10

Q : It provides protection to heart by preventing over extension:

A Epicardium

B **Pericardium**

C Pericardial fluid

D Pleural fluid

Explanation

Prevention of heart from over extension is the function of double membranous sac that surrounds heart.

Correct | Unattempted

Incorrect | 7/10

Q : This one is not the property of heart muscles:

A Automaticity

B Rhythmicity

C Branches

D Regular striations

Explanation

Cardiac muscles are cylindrical and irregularly striped. They are self - controlled by SA node but can also be regulated by autonomic nervous system.

Correct | Unattempted

Incorrect | 8/10

Q : Pulmonary artery carries:

A Oxygenated blood to lungs

B Deoxygenated blood to lungs

C Oxygenated blood from lungs

D Deoxygenated blood from lungs

Explanation

Pulmonary arteries arise from right ventricle and transfer blood towards lungs for oxygenation

Correct

Unattempted

Incorrect

9/10

Q : How many pulmonary veins carry blood from lungs to heart?

A 1

B 2

C 3

D 4

Explanation

Two pulmonary veins from each lung carry blood back towards lungs.

Correct | Unattempted

Incorrect | 10/10

Q : The difference between systolic and diastolic pressure become zero in:

A Aorta

B Arteries

C Arterioles

D Capillaries

Explanation

Pressure is due to elasticity of the vessels and capillaries do not have elasticity power, that's why difference becomes zero.

QUIZZES

Practice Test-3 Life Processes in Animals and Plants（Transport in Pl...

10 Questions

7 min

Topics

Lymphatic system, Immune system

Start Quiz

06 : 59

Q 1/10 7 min Hint

Q : Lymph node is drained by:

A Single afferent vessel

B Many afferent vessels

C Single efferent vessel

D Many efferent vessels

06 : 58

2/10 7 min Hint

Q : Just as the lymph nodes filter lymph, _____ filters blood:

A Liver

B Kidneys

C Lungs

D Spleen

06 : 57

3/10 7 min Hint

Q : Interstitial fluid contains all of the following except:

A Proteins

B Water

C Red blood cells

D White blood cells

06 : 56

Q 4/10 7 min Hint

Q : Lymph nodes are not present in:

A Brain

B Intestine

C Neck

D Thoracic region

06 : 55

5/10 7 min Hint

Q : This system is responsible for the transport and returning of materials from the body tissues to the blood:

A Blood circulatory system

B Urinary system

C Lymphatic system

D Endocrine system

06 : 54

Q 6/10 7 min Hint

Q : Skin and mucous membranes are examples of:

A Cellular barriers

B Physical barriers

C Chemical barriers

D Mechanical barriers

06 : 53

7/10 7 min Hint

Q : Immune system in our body acts as:

A 1st defense line

B 2nd defense line

C 3rd defense line

D 4th defense line

06 : 50

Q 8/10 7 min Hint

Q : Its influence is essential in making T-cells immunologically competent:

A Bone marrow

B Lymph node

C Thymus

D Spleen

06 : 49

9/10 7 min Hint

Q :

Cells that synthesize and liberate antibodies into the blood plasma:

A T lymphocytes

B B lymphocytes

C Plasma cell clone

D Phagocytes

06 : 48

Q 10/10 7 min Hint

Q : Disulfide bonds in an antibody molecule attach constant portion of heavy chain with:

A Constant portions of heavy chain

B Variable portions of heavy chain

C Variable portions of light chain

D Variable portions of light & heavy chain

Incorrect

1/10

Q : Lymph node is drained by:

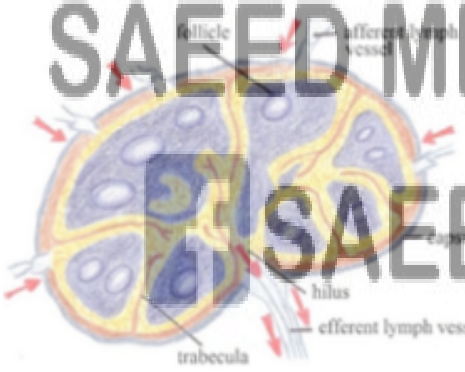
A Single afferent vessel

B Many afferent vessels

C Single efferent vessel

D Many efferent vessels

Explanation



Correct | Unattempted

Incorrect | 2/10

Q : Just as the lymph nodes filter lymph, _____ filters blood:

A Liver

B Kidneys

C Lungs

D Spleen

Explanation

The filtration similar to lymph nodes will take place in lymphoid mass which exposes blood to the action of phagocytes.

Correct | Unattempted

Incorrect | 3/10

Q : Interstitial fluid contains all of the following except:

A Proteins

B Water

C Red blood cells

D White blood cells

Explanation

Interstitial fluid is formed due to leakage of plasma as blood cells cannot cross capillaries.

Correct | Unattempted

Incorrect | 4/10

Q : Lymph nodes are not present in:

A Brain

B Intestine

C Neck

D Thoracic region

Explanation

CNS lacks a traditional lymphatic system.

Correct | Unattempted

Incorrect | 5/10

Q : This system is responsible for the transport and returning of materials from the body tissues to the blood:

A Blood circulatory system

B Urinary system

C Lymphatic system

D Endocrine system

Explanation

Circulatory system transports materials to tissues whereas urinary system is involved in removal of nitrogenous wastes.

Correct | Unattempted

Incorrect | 6/10

Q : Skin and mucous membranes are examples of:

A Cellular barriers

B Physical barriers

C Chemical barriers

D Mechanical barriers

Explanation

Skin and mucous membrane constitute 1st line of defense in immunity.

Correct | Unattempted

Incorrect | 7/10

Q : Immune system in our body acts as:

A 1st defense line

B 2nd defense line

C 3rd defense line

D 4th defense line

Explanation

Immune system comprises T and B lymphocytes.

Correct | Unattempted

Incorrect | 8/10

Q : Its influence is essential in making T-cells immunologically competent:

A Bone marrow

B Lymph node

C Thymus

D Spleen

Explanation

T lymphocytes become competent in their maturation site which is a lymphoid mass.

Correct | Unattempted

Incorrect | 9/10

Q :

Cells that synthesize and liberate antibodies into the blood plasma:

A T lymphocytes

B B lymphocytes

C Plasma cell clone

D Phagocytes

Explanation

These cells are formed from B lymphocytes upon detection of antigen in blood.

Q : Disulfide bonds in an antibody molecule attach constant portion of heavy chain with:

A Constant portions of heavy chain

B Variable portions of heavy chain

C Variable portions of light chain

D Variable portions of light & heavy chain

Explanation